

We claim:

1. A composition comprising:
 - a) a bioactive agent;
 - 5 b) an organic ion, wherein said organic ion protects against degradation of the polymer or bioactive agent; and
 - c) a polymer, wherein said polymer encapsulates said bioactive agent and said organic ion.
- 10 2. The composition of claim 1, wherein said composition is selected from the group consisting of microparticles and nanoparticles.
3. The composition of claim 2, wherein said microparticles and nanoparticles are biodegradable.
- 15 4. The composition of claim 1, wherein said polymer is selected from the group consisting of poly(lactide)s, poly(glycolide)s, poly(lactide-co-glycolide)s, poly(lactic acid)s, poly(glycolic acid)s, poly(lactic acid-co-glycolic acid)s, polycaprolactone, polycarbonates, polyesteramides, polyanhydrides, poly(amino acids),
20 polyorthoesters, polyacetyls, polycyanoacrylates, polyetheresters, poly(dioxanone)s, poly(alkylene alkylate)s, copolymers of polyethylene glycol and polyorthoester, biodegradable polyurethanes, blends and copolymers thereof.
- 25 5. The composition of claim 1, wherein said bioactive agent is selected from the group consisting of proteins, nucleic acids, carbohydrates, peptides, LHRH agonists and synthetic analogs thereof, leuprolide, oxytocin, somatostatin and synthetic analogs thereof, small molecule pharmaceutical substances, immunogens, metabolic precursors capable of promoting growth and survival of cells and tissues, antineoplastic agents, hormones, antihistamines, cardiovascular agents, anti-ulcer
30 agents, bronchodilators, vasodilators, central nervous system agents and narcotic antagonists.
- 35 6. The composition of claim 1, wherein said organic ion is selected from the group consisting of pamoate, trifluoromethyl-p-toluate, cholate, 2-naphthalene sulfonate, 2,3-naphthalene dicarboxylate, 1-hydroxy-2-naphthoate, 3-hydroxy-2-naphthoate, 2-naphthoate, and salicylsalicylate.

7. The composition of claim 1, wherein the stoichiometry of the bioactive agent relative to the organic ion ranges from about 1.0 to 1.5.
- 5 8. The composition of claim 1, wherein the bioactive agent is selected from the group consisting of octreotide, octreotide acetate and pharmaceutical equivalents thereof and the organic ion is pamoate.
9. The composition of claim 1, wherein the organic ion interacts with the bioactive agent to form a charged or neutral complex.
- 10 10. A controlled release microparticle composition comprising a bioactive agent in a polymer produced through a process which comprises the steps of:
- a) combining a biodegradable polymer and an organic phase;
 - 15 b) combining a bioactive agent and said organic phase;
 - c) combining an organic ion and an aqueous phase;
 - d) contacting the organic and aqueous phases through the use of an emulsion process; and
 - e) recovering said microparticles to produce a controlled release composition.
- 20 11. The composition of claim 10, wherein said composition is selected from the group consisting of microparticles and nanoparticles.
12. The composition of claim 11, wherein said microparticles and nanoparticles are biodegradable.
- 25 13. The composition of claim 10, wherein said polymer is selected from the group consisting of poly(lactide)s, poly(glycolide)s, poly(lactide-co-glycolide)s, poly(lactic acid)s, poly(glycolic acid)s, poly(lactic acid-co-glycolic acid)s, polycaprolactone, polycarbonates, polyesteramides, polyanhydrides, poly(amino acids),
- 30 polyorthoesters, polyacetyls, polycyanoacrylates, polyetheresters, poly(dioxanone)s, poly(alkylene alkylate)s, copolymers of polyethylene glycol and polyorthoester, biodegradable polyurethanes, blends and copolymers thereof.
- 35 14. The composition of claim 10, wherein said bioactive agent is selected from the group consisting of proteins, nucleic acids, carbohydrates, peptides, LHRH agonists

and synthetic analogs thereof, leuprolide, oxytocin, somatostatin and synthetic analogs thereof, small molecule pharmaceutical substances, immunogens, metabolic precursors capable of promoting growth and survival of cells and tissues, antineoplastic agents, hormones, antihistamines, cardiovascular agents, anti-ulcer
5 agents, bronchodilators, vasodilators, central nervous system agents and narcotic antagonists.

15. The composition of claim 10, wherein said organic ion is selected from the group consisting of pamoate, trifluoromethyl-p-toluate, cholate, 2-naphthalene sulfonate,
10 2,3-naphthalene dicarboxylate, 1-hydroxy-2-naphthoate, 3-hydroxy-2-naphthoate, 2-naphthoate, and salicylsalicylate.

16. The composition of claim 10, wherein the stoichiometry of the bioactive agent relative to the organic ion ranges from about 1.0 to 1.5.

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17. The composition of claim 10, wherein the bioactive agent is selected from the group consisting of octreotide, octreotide acetate and pharmaceutical equivalents thereof and the organic ion is pamoate.

20 18. The composition of claim 10, wherein the organic ion interacts with the bioactive agent to form a charged or neutral complex.

19. A composition comprising:

- 25 a) a bioactive agent;
b) an organic ion; and
c) a polymer, wherein said polymer encapsulates said bioactive agent and said organic ion, wherein a core load of said bioactive agent is greater than about 9%.

30 20. The composition of claim 19, wherein said composition is selected from the group consisting of microparticles and nanoparticles.

21. The composition of claim 20, wherein said microparticles and nanoparticles are biodegradable.

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22. The composition of claim 19, wherein said polymer is selected from the group consisting of poly(lactide)s, poly(glycolide)s, poly(lactide-co-glycolide)s, poly(lactic acid)s, poly(glycolic acid)s, poly(lactic acid-co-glycolic acid)s, polycaprolactone, polycarbonates, polyesteramides, polyanhydrides, poly(amino acids),
5 polyorthoesters, polyacetyls, polycyanoacrylates, polyetheresters, poly(dioxanone)s, poly(alkylene alkylate)s, copolymers of polyethylene glycol and polyorthoester, biodegradable polyurethanes, blends and copolymers thereof.
23. The composition of claim 19, wherein said bioactive agent is selected from the
10 group consisting of proteins, nucleic acids, carbohydrates, peptides, LHRH agonists and synthetic analogs thereof, leuprolide, oxytocin, somatostatin and synthetic analogs thereof, small molecule pharmaceutical substances, immunogens, metabolic precursors capable of promoting growth and survival of cells and tissues, antineoplastic agents, hormones, antihistamines, cardiovascular agents, anti-ulcer
15 agents, bronchodilators, vasodilators, central nervous system agents and narcotic antagonists.
24. The composition of claim 19, wherein said organic ion is selected from the group consisting of pamoate, trifluoromethyl-p-toluate, cholate, 2-naphthalene sulfonate,
20 2,3-naphthalene dicarboxylate, 1-hydroxy-2-naphthoate, 3-hydroxy-2-naphthoate, 2-naphthoate, and salicylsalicylate.
25. The composition of claim 19, wherein the stoichiometry of the bioactive agent relative to the organic ion ranges from about 1.0 to 1.5.
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26. The composition of claim 19, wherein the bioactive agent is selected from the group consisting of octreotide, octreotide acetate and pharmaceutical equivalents thereof and the organic ion is pamoate.
- 30 27. The composition of claim 19, wherein the organic ion interacts with the bioactive agent to form a charged or neutral complex.

28. A composition comprising:
- a) a bioactive agent;
 - b) an organic ion; and
 - c) a polymer, wherein said polymer encapsulates said bioactive agent and
5 said organic ion, wherein less than about 25% of said bioactive agent
 is in a degraded form upon release of said bioactive agent into a
 physiological medium.
29. The composition of claim 28, wherein said composition is selected from the
10 group consisting of microparticles and nanoparticles.
30. The composition of claim 29, wherein said microparticles and nanoparticles are
 biodegradable.
- 15 31. The composition of claim 28, wherein said polymer is selected from the group
 consisting of poly(lactide)s, poly(glycolide)s, poly(lactide-co-glycolide)s, poly(lactic
 acid)s, poly(glycolic acid)s, poly(lactic acid-co-glycolic acid)s, polycaprolactone,
 polycarbonates, polyesteramides, polyanhydrides, poly(amino acids),
 polyorthoesters, polyacetyls, polycyanoacrylates, polyetheresters, poly(dioxanone)s,
20 poly(alkylene alkylate)s, copolymers of polyethylene glycol and polyorthoester,
 biodegradable polyurethanes, blends and copolymers thereof.
- 25 32. The composition of claim 28, wherein said bioactive agent is selected from the
 group consisting of proteins, nucleic acids, carbohydrates, peptides, LHRH agonists
 and synthetic analogs thereof, leuprolide, oxytocin, somatostatin and synthetic
 analogs thereof, small molecule pharmaceutical substances, immunogens, metabolic
 precursors capable of promoting growth and survival of cells and tissues,
 antineoplastic agents, hormones, antihistamines, cardiovascular agents, anti-ulcer
 agents, bronchodilators, vasodilators, central nervous system agents and narcotic
30 antagonists.
33. The composition of claim 28, wherein said organic ion is selected from the group
 consisting of pamoate, trifluoromethyl-p-toluate, cholate, 2-naphthalene sulfonate,
 2,3-naphthalene dicarboxylate, 1-hydroxy-2-naphthoate, 3-hydroxy-2-naphthoate, 2-
35 naphthoate, and salicylsalicylate.

34. The composition of claim 28, wherein the stoichiometry of the bioactive agent relative to the organic ion ranges from about 1.0 to 1.5.

5 35. The composition of claim 28, wherein the bioactive agent is selected from the group consisting of octreotide, octreotide acetate and pharmaceutical equivalents thereof and the organic ion is pamoate.

36. The composition of claim 28, wherein the organic ion interacts with the bioactive agent to form a charged or neutral complex.

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